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Amendments to the Claims:

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The following listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claims 1-20.

21. (New) A honeycomb catalyst carrier comprising:

a honeycomb formed cell structure composed of a porous material having a large number of pores, the cell structure having cells each functioning as a fluid passage; and an outer wall composed of a porous material disposed so as to cover an outer periphery of the cell structure,

wherein the honeycomb catalyst carrier further comprises:

- i) an impregnated part formed in an outermost peripheral part, which has a given thickness, of the porous material of the cell structure, the impregnated part being impregnated with a water-insoluble organic material which disappears by burning or an inorganic material; or
- ii) an intermediate layer of an inorganic material formed between an outer periphery of the cell structure and an inner surface of the outer wall.
- 22. (New) The honeycomb catalyst carrier according to claim 21, wherein a permeability (k) of the impregnated part defined by the following equation (1) is lower than that of the other part of the porous material of the cell structure; or.

a permeability(k) of the intermediate layer defined by the following equation (1) is lower than that of the porous material of the cell structure.

$$\mathbf{k} = (\mu \cdot \mathbf{L}/\mathbf{A})(\Delta \mathbf{Q}/\Delta \mathbf{P}) \tag{1}$$

k: permeability (μm²)

μ: viscosity coefficient of air at 20 deg.C (μPa·sec)

L: thickness of sample (mm)

A: air-permeating area of sample (cm²)

 $\Delta Q/\Delta P$: gradient of "discharge air flow rate / compressed air pressure"

((cc/sec)/psi)

- 23. (New) The honeycomb catalyst carrier according to claim 21, wherein the permeability(k) of the impregnated part or the intermediate layer is 0.7 µm² or less.
- 24. (New) A honeycomb catalyst carrier comprising:

a honeycomb formed cell structure composed of a porous material having a large number of pores, the cell structure having cells each functioning as a fluid passage;

and an outer wall composed of a porous material disposed so as to cover an outer periphery of the cell structure,

wherein the honeycomb structure further comprises:

- iii) an impregnated part formed in an outermost peripheral part, which has a given thickness, of the porous material of the outer wall, the impregnated part being impregnated with a water-insoluble organic material which disappears by burning or an inorganic material;
- iv) an impregnated part formed in the whole porous material of the outer wall, the impregnated part being impregnated with a water-insoluble organic material which disappears by burning or an inorganic material; or
- v) a coat layer formed so as to cover an outer periphery of the outer wall, the coat layer comprising a water-insoluble organic material which disappears by burning or an

inorganic material.

25. (New) The honeycomb catalyst carrier according to claim 24, wherein a permeability (k) of the impregnated part defined by the following equation (1) is lower than that of the other part of the porous material of the outer wall; or

a permeability(k) of the coat layer defined by the following equation (1) is lower than that of the porous material of the outer wall.

$$k = (\mu \cdot L/A)(\Delta Q/\Delta P) \qquad (1)$$

k: permeability (μm²)

μ: viscosity coefficient of air at 20 deg.C (μPa·sec)

L: thickness of sample (mm)

A: air-permeating area of sample (cm²)

 $\Delta Q/\Delta P$: gradient of "discharge air flow rate / compressed air pressure"

((cc/sec)/psi)

- 26. (New) The honeycomb catalyst carrier according to claim 24, wherein the permeability(k) of the outer wall having the impregnated part or having the coat layer is 0.04 μm^2 or less.
- 27. (New) The honeycomb catalyst carrier according to claim 21, wherein the organic material for forming the impregnated part is a petroleum hydrocarbon oil, a silicone oil, a thermoplastic resin, a thermosetting resin, a wax or a mixture thereof.

- 28. (New) The honeycomb catalyst carrier according to claim 24, wherein the organic material for forming the impregnated part or the coat layer is a petroleum hydrocarbon oil, a silicone oil, a thermoplastic resin, a thermosetting resin, a wax or a mixture thereof.
- 29. (New) The honeycomb catalyst carrier according to claim 21, wherein the inorganic material for forming the impregnated part is a ceramic sol, an alkylsilane compound or a mixture thereof.
- 30. (New) The honeycomb catalyst carrier according to claim 24, wherein the inorganic material for forming the impregnated part or the coat layer is a ceramic sol, an alkylsilane compound or a mixture thereof.
- 31. (New) The honeycomb catalyst carrier according to claim 21, wherein the inorganic material for forming the intermediate layer is one or more of ceramics.
- 32. (New) The honeycomb catalyst carrier according to claim 24, wherein the inorganic material for forming the coat layer is one or more of ceramics.
- 33. (New) The honeycomb catalyst carrier according to claim 24, wherein the organic material for forming the coat layer is a thermoplastic resin, a thermosetting resin, a wax, or a natural or synthetic rubber.
- 34. (New) A method for production of a honeycomb catalyst carrier having a honeycomb formed cell structure composed of a porous material having a large number of pores, the cell structure having cells each functioning as a fluid passage,

wherein the method comprises a step selected from the group consisting of:

- i) impregnating a water-insoluble organic material which disappears by burning or an inorganic material into an outermost peripheral part, which has a given thickness, of the porous material of the cell structure to form an impregnated part; and then disposing an outer wall composed of a porous material so as to cover an outer periphery of the cell structure;
- ii) applying an inorganic material to an outer periphery of the cell structure to form an intermediate layer; and then disposing an outer wall composed of a porous material so as to cover the intermediate layer;
- iii) disposing an outer wall composed of a porous material so as to cover an outer periphery of the cell structure, and then impregnating a water-insoluble organic material which disappears by burning or an inorganic material into an outermost peripheral part, which has a given thickness, of the porous material of the outer wall to form an impregnated part;
- iv) disposing an outer wall composed of a porous material so as to cover an outer periphery of the cell structure; and then impregnating a water-insoluble organic material which disappears by burning or an inorganic material into the whole porous material of the outer wall to form an impregnated part; and
- v) disposing an outer wall composed of a porous material so as to cover an outer periphery of the cell structure, and then applying a water-insoluble organic material which disappears by burning or an inorganic material so as to cover an outer periphery of the outer wall to form a coat layer.